

# Work Order ID 50617

July 17, 2009 11:23:40 AM

Page 1

Item ID: D205-634-041

Accept

Revision ID: D

Item Name: Replacement Skidtube

Setup Start

Stop

Start Date: 7/20/09 Start Qty: 1.00

Required Date: 7/24/09 Req'd Qty: 1.00

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D2580

Rev D

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy D205-634 bluefile & type labels per PPP D205-634-041 CHG002

N/A see W/O 51021

110

0.00



BENDING MACHINE - SKIDTUBES

CNC Bend I

Memo

0.00

CNC Delta 100 Bender

1-Bend as per program D2580.C on CNC Bender and Folio FT009

2-Cut tubes as per Dwg. D2580

DP  
9-7-20

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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**NOTE:** Date & initial all entries

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Setup Start



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Customer:

Reference:

Run Start



Approvals: Process Plan: Date:

Tooling: Date:

Stop



QC: Date:

SPC (Y/N): Date:

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

120

0.00



Skidtubes

Memo

0.00

Skidtubes

1- Deburr ends

2- C'sink holes as per dwg without cutting fluid

3- Prepare tube for welding, remove alodine as required.

4- Scribe batch number insied aft end of tube.

ARM 9-7-21

130

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

8 09/02/21



W/O:		WORK ORDER CHANGES					
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Start Date: 7/20/09 Start Qty: 1.00  
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Cust Item ID:  
Customer:

Reference:

Approvals: Process Plan: Date: Tooling: Date:  
QC: Date: SPC (Y/N): Date:

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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140

0.00



Skidtubes

Memo

0.00

Skidtubes

1-Weld step D2576 as per Dwg. D2580 and QSI 004  
A/R [ ] Aluminum Rod

mill 679

BE 09/07/21

2-Prep per QSI 005 and weld crossbolt spacers D2579 as per Dwg. D2580, QSI 004.

For D2579 spacers, weld one side, pass 3/8" drill, weld other side, pass 3/8" drill

A/R [ ] Aluminum Rod

mill 679

BE 09/07/21

3-Grind welds as per Dwg D2580 Grind flush ridge made from bending

4-Drill holes for wearplates using DT 8217 & DT8937 Open holes to 19/64", adjust stopper not to hit web. Debur

5-Counterbore crossbolt spacers to 7/16" ID x 1.0" deep as per Dwg D2580. Debur holes

6-Drill pilot holes for aft cap using DT 8215 Open holes to 0.208". Debur

7-Drill pilot holes for Tow ring using DT8091, open to .640" and Debur

3 BE 09/07/21

W/O:		WORK ORDER CHANGES					
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Customer:

Reference:

Run Start



Approvals: Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

150

QC10- Inspect visual per QSI004- ground welds

0.00



QC

Memo

0.00

Quality Control

160

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

170

Pressure Wash per QSI005 4.3

0.00



HandFinish

Memo

0.00

Hand Finishing

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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Reference:

Approvals: Process Plan: Date: Tooling: Date:  
QC: Date: SPC (Y/N): Date:

Run Start



Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

180

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

Memo

START TIME:  
OVEN TEMPERATURE:  
FINISH TIME:

3:40  
320°  
4:10

0.00

Powder Coating

BR 09-07-22 ①

190

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

M 09 07-22 ①

W/O:		WORK ORDER CHANGES					
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Reference:

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Approvals: Process Plan:

Date:

Tooling:

Date:

Stop



QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

200

0.00



HandFinish

Memo

0.00

Hand Finishing

1-Install inserts & wearplates & Gaskets as per Dwg. D2580. Use a drop of Sikaflex on insert holes before installing wearplates  
A/R ☐ Sikaflex-291 ☒ M111557  
Sikaflex expire date: 10/01

2-Coat D2594-3 O' rings with Petroleum Jelly and install on D2594-1 plugs as per Dwg D2580

3-Inspect for foreign object per QSI 024

4-Install 2855 Aft Cap as per Dwg D2580 and seal Fwd Step & Aft Cap with Sikaflex. Clean excess adhesive  
A/R ☐ Sikaflex-291 ☒ M111557  
Sikaflex expire date: 10/01

5-Wing Walk as per Dwg D2580 and QSI 005 4.4  
Batch: M111013

Handwritten notes and signatures:

- A large curved line spanning across the bottom right section.
- Signature: *g/f*
- Date: 05-07-22
- Stamp: (X)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

Stop

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Draw  
Number

Draw  
Rev.

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

210

QC5- Inspect part completeness to step on W/O

0.00

QC

Memo

0.00

Quality Control

Inspect Aft Cap, Fwd Step and Wing Walk of work to Current Step Inspect for Foreign objects per QSI 024

DSorlus30 ⑩ f

220

Packaging

0.00

Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPPD205-634-041

Location:

PPP Rev:

81957021

9/7/31

230

QC21- Final Inspection - Work Order Release

0.00

QC

Memo

0.00

Quality Control

09-08-05  
12

u 9-08-04

# Picklist Print

Page 1

July 17, 2009 11:23:38 AM

Work Order ID: 50617

Parent Item: D205-634-041RevD

Parent Item Name: Replacement Skidtube

Comments:

Start Date: 7/20/09

Required Date: 7/24/09

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
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D2580-1RevD

Manufactured

No

110

Each

3.0000

1.0000



205 Skidtube bent detail

## Warehouse

## Loc Qty

## Loc Code

### Location

Main Warehouse

ST

48616

3

3

140

Each

168.0000

1.0000

D2576-3RevG

Manufactured

No



Step (maching detail)

## Warehouse

## Loc Qty

## Loc Code

### Location

Main Warehouse

ST

43504

46661

168

65

103

140

Each

532.0000

20.0000

D2579RevE

Manufactured

No



Crossbolt Spacer

## Warehouse

## Loc Qty

## Loc Code

### Location

Main Warehouse

ST

43988

46434

46956

47797

48272

532

4

4

32

438

54

①

1 BE 09/07/21

20 Aug 9-7-21

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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July 17, 2009 11:23:38 AM

Work Order ID: 50617

Parent Item: D205-634-041RevD

Parent Item Name: Replacement Skidtube

Comments:

Start Date: 7/20/09

Required Date: 7/24/09

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

D2855RevA

Manufactured

No

200

Each

15.0000

1.0000



Cap

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

10360

2

35663

7

41340

1

42343

3

42806

2

AN3-5A

Purchased

No

200

Each

2,564.000

2.0000



Bolt

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

2564

100188

246

105057

2246

15205

72

x1 98 09-02-29 (X)

x1 09-02-29 (X)



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July 17, 2009 11:23:39 AM

Work Order ID: 50617

Parent Item: D205-634-041RevD

Parent Item Name: Replacement Skidtube

Comments:

Start Date: 7/20/09

Required Date: 7/24/09

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
AN960JD10L		Purchased	No			200	Each	7,089.000	2.0000			



Washer



Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST 7173

101291 16

104885 153

105793 236

109632 1768

110985 5000

Main Warehouse

ST182 -84

109632 -84

ALS7-1032-130

Purchased

No

200

Each

3,850.000 50.0000



Insert



Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST 3850

108606 52

111529 1798

111779 2000

M110511

150

*[Handwritten signature]*

09-0429 (X)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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AN3C4A		Purchased	No			200	Each	230.0000	50.0000			
												
BOLT												

Warehouse  
Location

Loc Qty

Loc Code

Main Warehouse

ST

230

112082

230

AN960C10L

Purchased

No

200

Each

4,824.000

50.0000



washer



Warehouse  
Location

Loc Qty

Loc Code

Main Warehouse

ST

4824

103585

100

112116

4724

ll

09-07-29

ll

09-07-29

W/O:		WORK ORDER CHANGES					
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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D3566-13RevC		Manufactured	No			200	Each	32.0000	1.0000			



Gasket

Warehouse Loc Qty Loc Code

Location

Main Warehouse

FP17

-1

46889

-1

Main Warehouse

ST

33

45717

1

46889

6

47435

8

48166

18

D3566-5RevC

Manufactured

No

200

Each

23.0000

1.0000



Gasket

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST

23

36113

1

46186

1

47318

1

48167

20

July 17, 2009 11:23:39 AM

Shop Packet Print

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3566-1RevC		Manufactured	No			200	Each	24.0000	2.0000			



Gasket



<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	24	
46349	1	
47434	2	
48165	10	
48557	11	

07-07-29

D3564-11RevD

Manufactured No

200

Each

21.0000

1.0000



Wearshoe



<u>Warehouse</u>	<u>Loc Qty</u>	<u>Loc Code</u>
<u>Location</u>		
Main Warehouse		
ST	21	
45823	1	
47432	8	
48553	12	

09-07-29



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

D3564-13RevD		Manufactured	No			200	Each	34.0000	1.0000			
--------------	--	--------------	----	--	--	-----	------	---------	--------	--	--	--



Wearshoe

Warehouse	Loc Qty	Loc Code
-----------	---------	----------

Location

Main Warehouse

FP17	13	
------	----	--

48554	13	
-------	----	--

Main Warehouse

ST	21	
----	----	--

45409	3	
-------	---	--

46495	10	
-------	----	--

47867	8	
-------	---	--

D3564-9RevD		Manufactured	No			200	Each	18.0000	1.0000			
-------------	--	--------------	----	--	--	-----	------	---------	--------	--	--	--



Wearshoe

Warehouse	Loc Qty	Loc Code
-----------	---------	----------

Location

Main Warehouse

ST	18	
----	----	--

44659	1	
-------	---	--

45825	1	
-------	---	--

47316	4	
-------	---	--

48556	12	
-------	----	--

JU 09-07-29

JU 09-07-29

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

July 17, 2009 11:23:39 AM

Work Order ID: 50617

Parent Item: D205-634-041RevD

Parent Item Name: Replacement Skidtube

Comments:

Start Date: 7/20/09

Required Date: 7/24/09

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D3564-5RevD		Manufactured	No			200	Each	23.0000	1.0000			



Wearshoe

Warehouse                      Loc Qty                      Loc Code  
Location

OFFSHORE

FG    2

34806    2

Main Warehouse

FP19    12

48555    12

Main Warehouse

ST    9

45824    1

47433    1

48164    7

D2594-3RevC

Manufactured      No

200

Each

932.0000

16.0000



O-Ring, 205 Skidtube

Warehouse                      Loc Qty                      Loc Code  
Location

Main Warehouse

ST    932

27168    44

29908    888

sl

09-07-29

sl

09-07-29

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

Page 9

July 17, 2009 11:23:39 AM

Work Order ID: 50617

Parent Item: D205-634-041RevD

Parent Item Name: Replacement Skidtube


Comments:

Start Date: 7/20/09

Required Date: 7/24/09

Start Qty: 1.00

Required Qty: 1.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
D2594-1RevC		Manufactured	No			200	Each	726.0000	16.0000			
												
Plug, 205 Skidtube												

Warehouse Loc Qty Loc Code

Location

Main Warehouse

ST	726
42221	16
42807	92
43884	113
46435	3
47251	502

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

09-07-29

July 17, 2009 11:23:39 AM

Shop Packet Print

Page 9

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

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07 06 28 #

DESIGN #	DRAWN BY PH	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED #	APPROVED #	DRAWING NO. D2580	REV. D SHEET 1 OF 3
DATE 07.02.27		TITLE 205 SKIDTUBE ASSEMBLY	SCALE NTS
A	96.09.16	NEW ISSUE	
B	96.12.02	AS MANUFACTURED	
C	98.08.26	REDRAWN, INCLUDED DEO 9094/9097	
D	07.02.27	CHANGE TO SS WEARPLATES AND GASKETS, INCLUDE DEO 9124/9183	

QTY -041	QTY -045	Part Number	Description
X		D2580-041	SKIDTUBE ASSEMBLY
	X	D2580-045	SKIDTUBE ASSEMBLY
1	1	D2500-1-190	EXTRUSION
1	1	D2576-3	STEP
20	24	D2579	CROSS BOLT SPACER
16	16	D2594-1	PLUG
16	16	D2594-3	O-RING
1	1	D2596	205 WEB
1	1	D2855	AFT CAP
1	1	D3564-5	WEARSHOE
1	1	D3564-9	WEARSHOE
1	1	D3564-11	WEARSHOE
1	1	D3564-13	WEARSHOE
2	2	D3566-1	GASKET
1	1	D3566-5	GASKET
1	1	D3566-13	GASKET
50	50	ALS7-1032-130 or AKS7-1032-130 or AKS4-1032-130 or AELS-1032-130	INSERT
50	50	AN3C4A	BOLT
2	2	AN3-5A	BOLT
50	50	AN960C10L	WASHER
2	2	AN960JD10L	WASHER

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WORK ORDER  
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**GENERAL NOTES:**

- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 2) ALL DIMENSIONS ARE IN INCHES
- 3) INSERT D2596 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP.
- 4) BEND AS A SMOOTH RADIUS STARTING WITH A MAXIMUM CENTERLINE RADIUS OF 60 AND ENDING WITH A MINIMUM RADIUS OF 30. A MAXIMUM REDUCTION OF 0.200 IN DIAMETER IS ALLOWABLE IN THE BENT PORTION OF THE TUBE.
- 5) USE DART DRILL TEMPLATE TD2577-205 TO LOCATE AND DRILL Ø0.297 HOLES FOR WEARSHOE INSERTS. INSTALL ALS7-1032-130 PER SECTION D-D (50 PLACES) AFTER FINISH. INSTALL AN3C4A BOLTS AND AN960C10L WASHERS WITH SIKAFLEX-241/-291.
- 6) WELDING TO BE DONE PER DART QSI 004.
- 7) FINISH:  
SEE NOTES ON  
PAGE 2 FOR D2580-041 AND  
PAGE 3 FOR D2580-045
- 8) INSERT D2594-1 PLUG C/W D2594-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE) AFTER FINISH (16 PLACES).

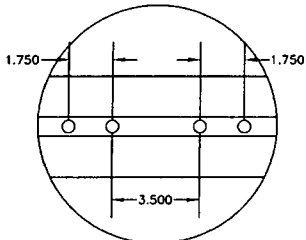
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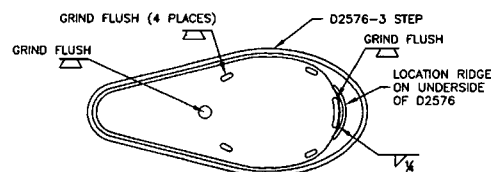


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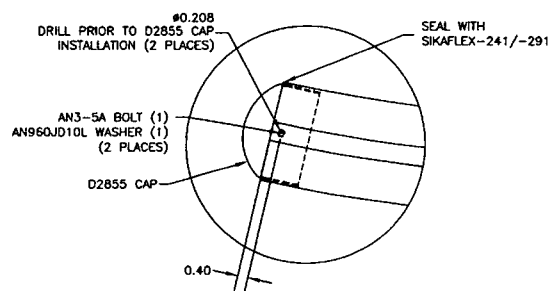
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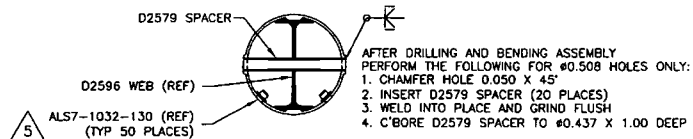
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**DETAIL C**  
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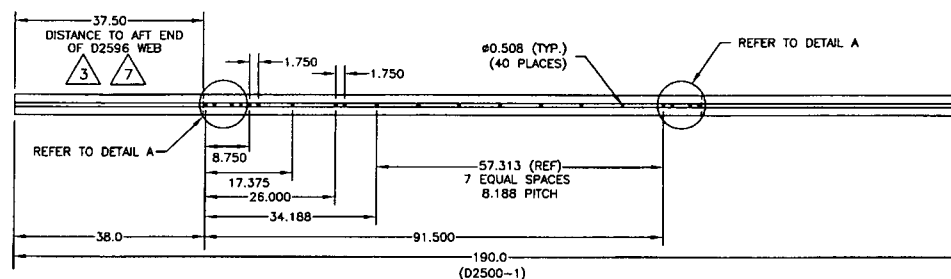
**SECTION D-D**  
SCALE 5:24



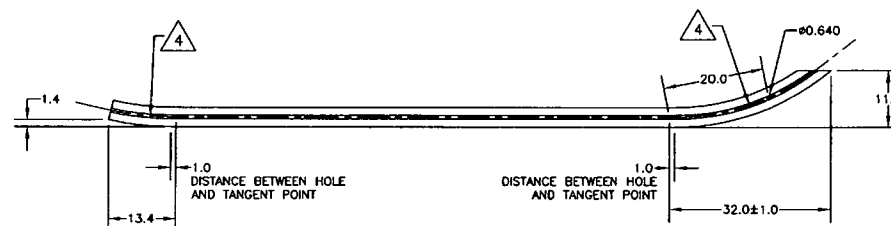
## D2580-041 NOTES

- i) FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1 PRIOR TO INSERTING D2596 WEB POWDER COAT ASSEMBLY GLOSS WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3 BLACK ANTI-SKID PAINT AS INDICATED PER DART QSI 005 4.4

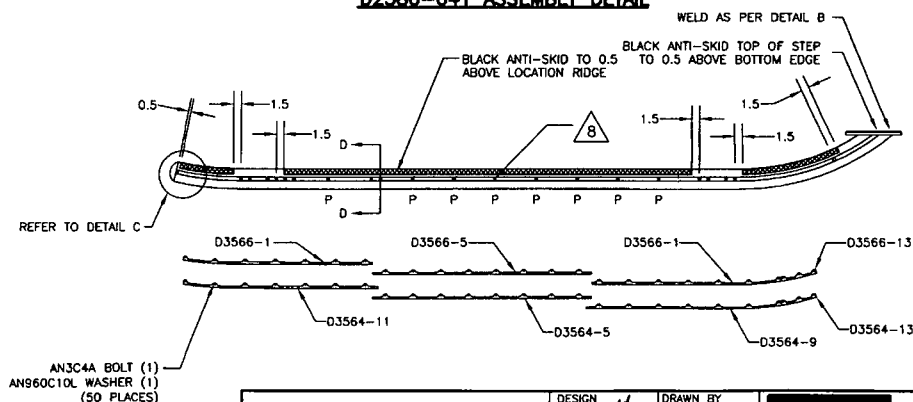
D2580-1 DRILLING DETAIL



D2580-1 BENDING AND CUTTING DETAIL



D2580-041 ASSEMBLY DETAIL



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CHECKED	<i>[Signature]</i>
DATE	07.02.27

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	APPROVED H

		<b>DART AEROSPACE LTD.</b> MARKHAM, ONTARIO, CANADA	
DRAWING NO.		REV. D	
D2580		SHEET 2 OF 3	
TITLE		SCALE	
205 SKIDTUBE ASSEMBLY		1:24	

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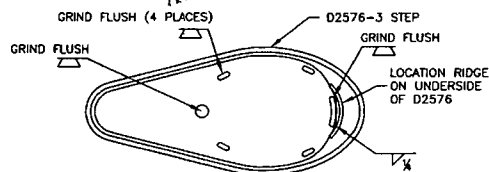


Diagram illustrating the installation of the D2855 cap on the rear of the engine. The cap is secured with AN3-5A bolts (1) and AN960JD10L washers (1) (2 PLACES). The cap is sealed with SIKAFLEX-241/-291. A dimension of 0.40 is indicated for the cap's thickness. A note refers to SEE NOTE ii).

D2579 SPACER

D2596 WEB (REF)

AL57-1032-130 (REF)  
(TYP 50 PLACES)

5

AFTER DRILLING AND BENDING ASSEMBLY  
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:

1. CHAMFER HOLE 0.050 X 45°
2. INSERT D2579 SPACER (20 PLACES)
3. WELD INTO PLACE AND GRIND FLUSH
4. C-BORE D2579 SPACER TO Ø0.437 X 1.00 DEEP

i) FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1 PRIOR TO INSERTING D2596 WEB  
POWDER COAT ENTIRE ASSEMBLY GREEN (REF. 4.3.5.8) PER DART QSI 005 4.3  
BLACK ANTI-SKID PAINT AS INDICATED PER DART QSI 005 4.4

ii) IT IS ACCEPTABLE TO GRIND A RELIEF IN THE D2855 AFT CAP TO PREVENT INTERFERENCE  
WITH THE SPACER AT THIS LOCATION

[illegible]

(MAKE FROM D2580-1 DRILLING DETAIL)

Technical drawing of a propeller shaft with the following dimensions and callouts:

- Overall length: 51.340
- Distance from left end to first hole: 5.985
- Distance between first and second holes: 5.338 (REF)
- Distance from second hole to third hole: 39.580
- Distance from third hole to fourth hole: 5.915
- Distance from fourth hole to fifth hole: 20.0
- Distance from fifth hole to right end: 32.0 ± 1.0
- Hole diameters:
  - First hole: 1.4
  - Second hole: 1.0
  - Third hole: 3.630 (REF)
  - Fourth hole: 1.0
  - Fifth hole: 0.640
- Other features:
  - Callout 4 points to the left end and the first hole.
  - Callout 4 points to the fourth hole.
  - Callout 4 points to the fifth hole.
  - Text: "DISTANCE BETWEEN HOLE AND TANGENT POINT" (twice, pointing to the 1.0 dimensions).
  - Text: "Ø0.508 (8 PLACES)" (pointing to the shaft body).

[illegible]

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DATE 07.02.27

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DRAWING NO.
D2580

REV. D  
SHEET 3 OF 3

SCALE

3042

NO. 202

AWS D17.1.2001  
QUALIFICATION TEST RECORD

Name: Berley Elliott  
Job number: 48448A  
Part number: D805634 041  
Description: 205 skid tube  
Welding Process: Tig[☒] Mig[ ]  
Base material: Aluminium  
Current: AC[☒] DC[ ]

TEST REQUIREMENTS AND RESULTS

Visual:  
Penetration:

pass[☒] fail[ ]  
pass[☒] fail[ ]

UNACCEPTABLE

Cracks:  
Undercut:  
Pin holes:  
Overlap (cold lap)  
Porosity (surface):  
Coloration:

pass[☒] fail[ ]  
pass[☒] fail[ ]  
pass[☒] fail[ ]  
pass[☒] fail[ ]  
pass[☒] fail[ ]  
pass[☒] fail[ ]

REFERENCE ONLY

Qualifier P. D. Dal Date of Test Coupon 09.06.17  
Welder Berley Elliott Date of Test Coupon 09.06.17

The above named individual is qualified in accordance with AWS D17.1.2001 to weld